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Book review

The Fingerprint Sourcebook, Eric H. Holder, Jr., Laurie O. Robinson, John H. Laub. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Washington DC, USA, (August 2011), 1st ed., 422 pp., available at <http://www.nij.gov/pubs-sum/225320.htm>.

Each individual's fingerprints are unique and remain unchanged throughout their lifetime. Hence, fingerprints are considered as an excellent means of identification. For many years, the science of fingerprints has been the area of interest to most of the forensic investigators and several noteworthy publications are available on this topic. With the growing and ever-changing field of the broad discipline of forensic science, there is a need for new knowledge and research in the field of fingerprint science. Recently released book *THE FINGERPRINT SOURCEBOOK* introduces the readers to the role of fingerprint experts/examiners in solving the crimes all over the world. This book is an excellent addition to the literature on fingerprint science. Chapters of this book extensively demonstrate the latest information in the field of fingerprint science. The authors include individuals working in academic institutions, law enforcement agencies and government agencies that have participated in numerous types of forensic investigations around the world. It truly is a compendium of the breadth and depth on useful information in the field.

All the 15 chapters of this book represent recent research and various aspects of fingerprint science in solving crimes. *Chapter 1* describes the overview of history of fingerprints from ancient times to the 20th century. It draws attention to some of the earlier innovations in the field of fingerprints. The gradient of timeline, from 221 B.C. to 1940, is described in a very simple and impressive manner so that readers can understand it quickly. *Chapter 2* provides the information regarding the anatomy and physiology of friction ridge skin. The anatomy, physiology and persistency of friction ridge skin are described in a well organized and systematic manner along with the good quality images. *Chapter 3* provides the information regarding growth and development of hand and friction ridge skin. It also describes the role of genetics in development of friction ridge skin in brief. *Chapter 4* demonstrates the various methods and techniques for recording of fingerprints or friction ridge details of living subjects and deceased individuals. *Chapter 5* demonstrates the various systems of friction ridge classification and their importance in the identification of unknown individuals. Interpretation, identification and examination of delta and core are not described and the methods used to determine the ridge counts and ridge tracings are not mentioned in this chapter. *Chapter 6* provides the information regarding the Automated Fingerprint Identification System

(AFIS) used for the identification and comparison of fingerprints. Various types of algorithms, image acquisition, image enhancement and feature extraction are briefly described in this chapter. *Chapter 7* demonstrates the various methods and techniques used for the development of latent prints on wide range of surfaces. Classification of fingerprints, surface types, process selection and handling and packaging of evidence is also briefly mentioned. The composition of latent fingerprint residue is described in detail. However, Small Particle Reagent (SPR) method used for the development of the latent fingerprints is not described anywhere in this chapter. *Chapter 8* describes the photographic method for the preservation of friction ridge details. Fingerprint lifters and casting material can also be used to preserve fingerprints. *Chapter 9* describes the process of examination of fingerprints along with the fundamentals of comparison. First, second and third levels of detail of features are used to describe the clarity of fingerprints and for comparison purposes. *Chapter 10* is very well written. It describes the process of documentation of friction ridge impressions from scene of crime to conclusion. The importance of documentation and chain of custody is described in a well organized manner. This chapter presents several guidelines for crime scene investigators. *Chapter 11* provides the information regarding the equipments used to locate, develop and preserve the latent fingerprints at scene of crime or in laboratory along with the comparison tools used for their examination. *Chapter 12* describes different aspects of quality assurance programme in fingerprint examination. It describes higher standards of forensic excellence to produce a quality work product. *Chapter 13* demonstrates the admissibility of fingerprints, as a source of identification, in U.S. law with some important case reports. It also describes the rules of evidence. *Chapter 14* provides the information regarding the scientific research and literature in a very well and organized manner. Fingerprint individuality probability models since 1892–2001 are described along with the overview of comparison methodology. *Chapter 15* describes in brief about the cognitive and psychological elements involved in fingerprint identification.

This book is a useful addition to the literature and should prove a good sourcebook for the crime scene experts and other professionals who are presently tasked with fingerprint examination. We recommend its inclusion in the libraries at universities and colleges that have forensic science, forensic medicine or forensic anthropology programmes at their undergraduate or postgraduate levels. The scientists who are involved in fingerprint analysis will add this book to their collection and will realize how beneficial it is to forensic services. We recommend it to others who are interested in the growing and diverse fields of fingerprint science or forensic science. We highly recommend this book as an educational and technical resource for any forensic scientist who has a strong passion for learning, research and crime scene investigation.

Conflict of interest

The authors state that there is no conflict of interest regarding this book review.

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